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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/914,569	08/31/2001	Kazuyuki Miya	L9289.01177	8327

7590 12/01/2005

Stevens Davis Miller & Mosher  
1615 L Street NW Suite 850  
Washington, DC 20036

EXAMINER

KNOWLIN, THJUAN P

ART UNIT	PAPER NUMBER
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2642

DATE MAILED: 12/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/914,569	<b>Applicant(s)</b> MIYA, KAZUYUKI	
	<b>Examiner</b> Thjuan P. Knowlin	<b>Art Unit</b> 2642	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 September 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 11-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>08/31/05</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

1. Applicant's amendment filed on September 15, 2005 has been entered. No claims have been amended. Claims 1-10 have been cancelled. Claims 11-21 have been added. Claims 11-21 are now pending in this application, with claims 11 and 21 being independent.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 11-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Dent (US 6,356,771).

3. In regards to claims 11, 15, and 21, Dent discloses a base station apparatus (See Fig. 1 and col. 3 lines 58-59) and radio communication method (See col. 2 lines 60-62) comprising: a calculator that calculates a receiving weight, for reception of a RACH signal, prior to reception of a preamble section of the RACH signal (See col. 7 lines 24-55, col. 8 lines 13-24, and col. 9 lines 25-31); a receiver (See Fig. 1,

transmitter/receiver 13 and Fig. 7, receiver 21) that receives the preamble section, by an adaptive array antenna, in a plurality of receiving directivity patterns set, using the receiving weight, prior to the reception of the preamble section (See col. 5-6 lines 66-13, col. 7 lines 24-32, and col. 8 lines 52-57); a preparer that prepares a delay profile of the preamble section per receiving directivity pattern (See col. 5-6 lines 66-13, col. 6 lines 23-38, and col. 9-10 lines 63-10); a correlation level detector that detects a correlation level per receiving directivity pattern using the corresponding delay profile (See col. 9 lines 48-56); and a preamble detector that detects the preamble section using the detected correlation levels (See col. 7 lines 39-48).

4. In regards to claim 12, Dent discloses the base station, further comprising an estimator that estimates a direction of arrival of a dedicated physical channel signal, wherein: the calculator calculates the receiving weight based on said direction of arrival (See col. 5-6 lines 66-13, col. 6 lines 23-38, col. 8 lines 40-62, and col. 9 lines 25-31).

5. In regards to claim 13, Dent discloses the base station, wherein the plurality of receiving directivity patterns are used to divide communication terminals into groups, based on the direction of arrival of a dedicated physical channel from each of the communication terminals, and a receiving directivity pattern is determined for each group (See col. 5 lines 17-48 and col. 7-8 lines 61-11).

6. In regards to claims 14, 16, and 20, Dent discloses the base station, wherein the receiver receives, by the adaptive array antenna, a message section following the preamble section in a directivity pattern that is the same as at least one of the plurality of receiving directivity patterns (See col. 8 lines 25-57).

7. In regards to claims 17, 18, and 19, Dent discloses the base station, further comprising a transmitter (See Fig. 6 and transmitter/receiver 13) that transmits a AICH signal (e.g. control signal) in a transmission directivity pattern that is determined based on at least one of the plurality of receiving directivity patterns (See col. 7-8 lines 24-11).

### ***Response to Arguments***

8. Applicant's arguments with respect to claims 11-21 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ovesjo et al (US 6,542,484) teach a code allocation for radio communication systems.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

11. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

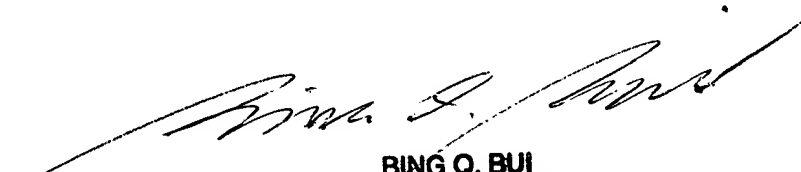
extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thjuan P. Knowlin whose telephone number is (571) 272-7486. The examiner can normally be reached on Mon-Fri 8:30-5:00pm.

13. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad Matar can be reached on (571) 272-7488. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thjuan P. Knowlin



**BING Q. BUI**  
**PRIMARY EXAMINER**